

SPLIT TYPE HIGH WALL AIR CONDITIONER







Installation & Operation Instruction Manual

Please read this manual carefully before operating the unit.

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P/N: REV

WARNING AND CAUTION

- 1. Do not store or unpack the unit in a wet area or expose to rain or water.

AC130013 0

* it may cause the unit short circuit and may result electric shocks or fire.

- 2. Do not install in a place where flammable gas may leak .
- * it may cause fire.

3. This unit is designed for domestic and commercial use only.

* if used in certain enviroments, such as manufacturing workplace, the air conditioner may not function efficiently.















- The air direction can be adjusted appropriately. The air coming out of the unit must not strike people directly it could cause cold sensation and resulting discomfort. Adjust the air deflector by hands and use the remote control to adjust the horizontal louver.
- Do not put anything in the air inlets or outlet slot, this could cause injury to the people and damage to the fan.

Splashing water on the air conditioner can cause an electrical shock and malfunction on the unit.

- The ground must be connected. Do not connect the ground wire to water pipes, gas pipes, lighting rods, and telephone ground wire.
- Select the most appropriate temperature to provide maximum comfort in room. Keep the room cooler than outside about 5°C. Careful choice of the room temperature will lead to energy savings.





TROUBLE SHOOTING GUIDE

3. Wireless remote controller is not functioning.	 Is the remote control unit out of effective distance to the indoor unit. Are there any obstruction bet- ween the remote controller and signal receptor. Is the battery dryout? 	 Use the remote controller in sufficient distance. Remove or clean the obstruction. Replace with new batteries. The system will resume when 			
4. Cool blinking	1. The freeze protection is activated.	1. The system will resume when indoor coil temperature become 7°C or up.			

Problems that needs guailified personel assistance.

PROBLEM	PROBLEM CAUSE	REMEDY		
1. Air conditioner doesn't run.	 Faulty contactor, relay and fan motor capacitor. Control board not functioning. Terminal loose. 	 Replace faulty components. Check the cause of malfunctioning and replace control board. if necessary. Check and retighten. 		
2. E1 blinking E2 blinking	 Room Sensor error is activated, Freeze Sensor error is activated. 	 Check all sensors for loss con- nection and replace defective sensors if necessary. 		

IMPORTANT INFORMATION

NARNING

The Unit is connected to the power supply. Operations performed by persons without the required technical skills can lead to personal injury to the operator or damage to the unit and surrounding objects.

MALFUNCTIONING

In the case of malfunctioning remove the power to the unit then repower it and start up the unit again. If the problems occur again, call sevices personnel promptly.



Air conditioner must be operated comply with the Power, Amps and Hz noted in the unit name plate. Failing to do so, it may cause permanents damage to the unit.

PREPARATIONS BEFORE INSTALLATION

READ ALL SAFETY INFORMATION BEFORE INSTALLATION:

- Installations must performed by a qualified technician.
- Before carrying out installation, put proper individual protection device.
- This air conditioner must be properly installed in accordance with the Installation Manual.
- Check all local codes and ordinances that could affect installation of this unit.
- Refer to rating plate on each unit for the correct voltage, frequency and amperes.
- Be sure that the power supply is corresponds to the specified rating in the nameplate.
- Check electrical service provided by utility for the site to be sure the electrical service capacity can handle the load imposed by this unit.
- Do not use the extension cables. In the case extended cables are needed use terminal block.
- Refer to dimensional drawings for location of refrigerant pipings, condensate drain, and electrical connections before setting in place.
- The appliance shall be installed in accordance with national wiring regulations.
- This appliance is not intended for use by persons (Including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.



- Moving machinery and electrical power is hazards it may cause severe injury or death. Disconnect and lock off the power during installation and making any repair or any services.
- Sharp edges and coil surfaces are a potential injury hazard avoid contact with them.

MAIN COMPONENTS

- INDOOR UNIT
 - 1. Deco Panel 2. Evaporator Coll

3. Horizontal Louver

4. Remote Control Unit 7. Display Module 8. Base Pan

9. Frame Grille



5. Air Filters

6. Emergency/

MAIN COMPONENTS

- Description of the components
 - 1. DECO PANEL the air intake is via the slots. When raising the panel, one has access to the air filters and the other internal parts.
 - 2. EVAPORATOR COIL This is made of a copper tube with turbelented type aluminum louvers.
 - 3. HORIZONTAL LOUVER Use to deflect the air from the unit, operated with the step motor.
 - 4. REMOTE CONTROL Using this unit make possible to set all operating parameters of the unit, these parameter are show in the LCD display to make the programming operations easier.
 - 5. AIR FILTERS To trap all dirt and dust coming with the air.
 - 6. EMERGENCY/AUXILIARY SWITCH make it possible to turn the unit "ON" or "OFF" in the absence of remote control. To access it, raise the deco panel.
 - 7. DISPLAY MODULE shown the current operating status of the unit, receive signal from remote control.
 - 8. BASE PAN The base of the whole unit.
 - 9. FRAME GRILLE This components were attached the deco panel, air filters and Emergency Switch. Use as the cover of the unit.

INSTALLATION PROCEDURE

* LOCATION FOR INDOOR UNIT

Select the location of the indoor unit with following consideration:

- 1. The front of the air inlet and outlet shall be free from any obstruction. The outlet air should flow out freely.
- 2. The wall where the unit is to be mounted should be strong enough to bear the weight and not to produce noise.
- 3. Ensure the clearance on every side of the indoor unit to conform to figure 1.
- 4. From floor, the height should be more than eye level.



OPERATION TIPS

• The following events may occur during normal operation.



UNIT DOES NOT OPERATE IMMEDIATELY.

If you restart the air conditioner within 3 minutes after turning it off, or changing the mode during operation. A protective device will work to shut off the unit for 3 minutes.



A PECULIAR SMELL COMING FROM THE UNIT.

Odors present in the room, such as those from the carpet, furniture or smoke maybe emitted from the unit.

HISSING SOUND HEAR DURING OPERATION.

A soft, swishing noise can be heard during operation or immediately after the unit is turned ON or OFF. This is the sound of circulating cooling/heat agent.

TROUBLE SHOOTING GUIDE

 If the unit appers to be malfunctioning, check the following points before calling for service.

PROBLEM	PROBLEM CAUSE REMEDY				
1. Air conditioner doesn't operate at all	 Is the power been shut down or power failure. Is the wiring connection loose? Is the power leakage protection in operation? Is Fuse blown or Circuit breaker open? 	 Wait for power resume. Tighten the connection. Reset the power leakage protection. Replace fuse or reset the circuit breaker. 			
2. Insufficient Cooling	 Is the set temperature is suitable? Is air inlet or outlet obstructed? Are filters are dirty? Is there any other heat source in the room? Is there a large number of people in the room? 	 Reset in suitable set temperature. Remove objects that obstruct the air inlet and outlet. Clean filters and other part. 			

CARE & MAINTENANCE

🕼 WARNING

- * Disconnect and lock off the power before making any repair or any services.
- * Sharp edges and coil surfaces are a potential injury hazard avoid contact with them.

MAINTENANCE

- If you plan to idle the unit for a long time, performed the following:
 - 1. Operate the fan motor to dry off the unit.
 - 2. Stop the air conditioner and disconnect power.
 - 3. Remove the batteries from the remote controller.
- CHECK BEFORE OPERATION
 - 1. Check the wiring is not broken off or disconnected.
 - 2. Check if the air filter is installed and the air outlet is not blocked.

* CLEANING THE FAN COIL UNIT



- 1. External cleaning weekly, to be done with a dry cloth soaked with fresh water and mild soap, avoid using any other type of detergent.
- The Frame grille with deco panel can be removed, clean with warm water not over 40°C and wipe with dry cloth.
- C Bank
- 3. Do not use a chemically treated cloth or duster to clean the unit.



- * CLEANING AIR FILTERS
 - * Dirty and clogged filters reduce the cooling efficiency of the unit, It recommended to clean the filters once every 2 weeks or weekly.



- 1. Open the deco panel by grasping the rounded groove and pulling it towards you.
- Hold the tabs of air filter and raise it slightly, then pull it downwards.
 Clean the air filters with vacuum cleaner or wash it with water then
- 3. Clean the air filters with vacuum cleaner or wash it with water the dry it up in the cool place.
- 4. Do not use benzene, thinner, polishing chemical or similar solvents for cleaning. These may cause the plastic surface to crack or deform.
- 5. Install the air filter vise versa of dismantling procedure. The correct filter side shown the "FRONT" letter towards you.

* MOUNTING PLATE INSTALLATION

- 1. After a suitable place for installation has been selected, place the mounting plate horizontally on the wall. Make sure the alignment is horizontal. Use a plumb line, if available.
- 2. Referring to the figure below, mark the location for the wall plugs and the hole for the pipings.

PLAN DIMENSIONS FOR MOUNTING PLATE INSTALLATION



(Left, Backward Piping Hole)

(Right, Backward Piping Hole)

MODEL	А	В	С	D	Е	F	G	Н	I	J
FWBE-13 FWBE-19 FWBE-25	1172	360	139	210	115	21	42	25	46	Ø70

FIGURE 3

- 3. Drill 1/4" diameter, 1-1/4" depth hole on the wall.
- 4. Insert the wall plugs.
- 5. Secure the mounting plate and check for stiffness.
- 6. Drill a piping hole 2-3/4" diameter hole either from the right or to the left of fan coil side (Refer to Figure 2, 3, & 4 on applicable Models) and make sure that the hole is slightly slant downward.

Dimensions are in millimeter.

7. If the wall is hollow please provide a sleeve for tube assembly to protect the drain line, Water pipings and field connection.





Drill diameter 1/4" depth 1-1/4" holes

Secure mounting plate and check the stiffness.





2-3/4" diameter concrete drill or hole saw from indoor side.

- Set pipe sleeve and caps (not supplied)
- * PIPING AND DRAINAGE OF INDOOR UNIT
 - 1. Route the indoor unit tubing with drain hose to the hole. There are four possible tubing routes. For the route 1, 2 and 4 cut the plate to pass the pipe through it, remove sharp edge left on the base pan.



- 2. Insert the indoor unit pipings and drain pipe through the hole.
- 3. Tape the tubing, drain hose, and connecting cable.
- 4. For the horizontal piping, make sure they are laid along the groove at the back of the unit and secure the piping using the piping holders (2 pieces) before fixing to the mounting plate

START-UP NOTICE

- 1. Be sure that there is no obstruction in the
- air outlet and intake vents.
- 2. Check if the filter is installed.
- 3. Check if the the power supply is connected.
- 4. Check if the ground wire is properly connected.

OPTIONAL FILTERS:

- CARBON FILTER
- ELECTROSTATIC FILTER



The FILTER PLASTIC BAG must remove before operation, Failing to do so, poor air circulation may observe which lead to insufficient cooling.



ADJUSTING AIR FLOW DIRECTION

- The horizontal louver and air deflectors on the air delivery can arranged in two directions:
 - * Air deflectors, to be oriented manually.
 - * Horizontal louver, can be oriented only by means of the remote controller.

ORIENT THE AIR DEFLECTOR:

- Turn the air deflector as indicated in the figure
- Both in Heating and Cooling mode it is advisable for the air flow not to hit people directly.



MOTORIZED HORIZONTAL LOUVER:

- Never orient the motorized horizontal louver manually. Any manual operation on the louver may cause damage in the system and cause malfunctioning.
- Adjust the horizontal louver using only the remote controller.



SELF DIAGNOSTIC

* This function can program the air conditioner to turn "OFF" in advance.



DISPLAY BOARD ON THE UNIT

1. TEMP/ERROR CODE

Normally shows the room temperature when the air-conditioner is turned on.

- If the setting temperature is changed it will blink the new setting in °C for 5 seconds
- If room sensor error is active, E1 will blink.
- If freeze sensor error is active, E2 will blink.

2. FAN SPEED

Shows the real working speed of the blower (not the setting speed).

3. DRY, COOL and FAN

Normally shows the working mode of operation.

• If freeze protection is active, COOL or DRY will be blinking.

4. TIMER

Shows the status of the auto start and auto stop.

5. COMP

Normally shows the status (on/off) of the compressor.

• COMP will be blinking, if the anti-over heat protection is occured,

* PIPING AND DRAINAGE OF INDOOR UNIT

1. Route the indoor unit tubing with drain hose to the hole. There are four possible tubing routes. For the route 1, 2 and 4 cut the plate to pass the pipe through it, remove sharp edge left on the base pan.



- 2. Insert the indoor unit pipings and drain pipe through the hole.
- 3. Tape the tubing, drain hose, and connecting cable.
- 4. For the horizontal piping, make sure they are laid along the groove at the back of the unit and secure the piping using the piping holders (2 pieces) before fixing to the mounting plate
- 5. Secure the unit to the mounting plate.



- 6. Connect the piping and make sure that the seals are fitted neatly.
- 7. Connect the drain hose and tape over the connecting parts.
- 8. Ensure that the drain hose has no traps or dips to impede the water flow.
- 9. Carefully seal any wall opening from weather to avoid any ingress of water.



MINIMUM DESIGN PRESSURE;

The minimum design pressure for cooling operation is 144 psig. (R22 Refrigerant) The minimum design pressure for cooling operation is 235 psig. (R410A Refrigerant)

INSULATION OF PIPES :

1. The pipe insulation should cover both SUCTION and LIQUID pipes as shown below. 2. Use the insulation of polyethylene foam minimum of 6 mm. in thickness.



* HOW TO REMOVE THE FRAME GRILLE

- 1. Open the front panel by grasping the panel at the side rounded groove and pulling it towards you.
- 2. Un screw the terminal cover, pull out and disconnect the display board connection as shown in the illustration.



6. PRESS THE SLEEP BUTTON SLEEP

Press "SLEEP" button to start the sleep fuction. The display will show ★ symbols.
 Figure below are the automatic temperature setting during COOL mode operation.



- * When the system is put in the sleep mode, and the or button is pressed, it will raised up or down the setting temperature 1°C.
- * Press the "SLEEP" button again to cancel the sleep function.
- * Power failure and by turning "OFF" the unit will cancel the sleep function.

AUTO START PROGRAM BY TIMER

- 1. PRESS THE ON/OFF BUTTON $m{0}$
 - Set the conditions (MODE, FAN, TEMP) that you want to active on re-starting.

2. PRESS THE START BUTTON 💮 🔊

- The Start time will blink
- Press the A button it will increase by 1 min.
- Press the 🛩 button it will decrease by 1 min.
- Press the START button again to activate the auto start, the start time display will stop blinking.
- To cancel this function, press START button again.

* This function can program the air conditioner to turn "ON" in advance.

AUTO STOP PROGRAM BY TIMER

- 1. PRESS THE ON/OFF BUTTON $\, {f O} \,$
 - Set the conditions (MODE, FAN, TEMP) that you want to active on re-starting.
- 2. PRESS THE STOP BUTTON () OFF
 - The Stop time will blink
 - Press the 🔨 button it will increase by 1 min.
 - Press the 🖌 button it will decrease by 1 min.
 - Press the STOP button again to activate the auto stop, the stop time time display will stop blinking.
 - To cancel this function, press STOP button again.
- * This function can program the air conditioner to turn "OFF" in advance.

- VENTILATION OPERATION (FAN)
- 1. PRESS THE ON/OFF BUTTON
 - The air conditioner comes ON and display module shown the last setting.
- 2. PRESS THE MODE BUTTON
 - Press the mode key repeatedly until the word "FAN" appears on the display. The Symbols will lit up in the module.

3. PRESS THE FAN BUTTON

- When the 🍄 key is pressed repeatedly, the system will changed the fan to auto, low, med, and high speed
- * The AUTO FAN will be disabled in Fan Mode (can be set but main unit will not response).

5. PRESS THE SW BUTTON AND U BUTTON.

- When the will key is pressed, the horizontal louver is oriented continuously oscillating movements. Press again to stop.
- When the *w* key is pressed, the angle of the horizontal louver will change one step at a time.

* FUNCTIONING IN JUST VENTILATION MODE

This program is used to move the room air and avoid stagnation.

- SLEEP OPERATION (SLEEP)
- 1. PRESS THE ON/OFF BUTTON $m{0}$
 - The air conditioner comes ON and display module shown the last setting.

2. PRESS THE MODE BUTTON

- Press the mode key to select you desire setting.

3. PRESS THE TEMPERATURE BUTTON TO REGULATE THE TEMPERATURE.

- The key with the symbols A allows increases of 1°C
- The key with the symbols \checkmark allows decreases of 1°C
- The display shows the set value, the temperature can be between 18°C and 30°C.

4. PRESS THE FAN BUTTON 🤧

- When the Steven key is pressed repeatedly, the system will changed the fan to auto, high, med and low speed

5. PRESS THE SW BUTTON AND UV BUTTON.

- When the sw key is pressed, the horizontal louver is oriented continuously oscillating movements. Press again to stop.
- When the *w* key is pressed, the angle of the horizontal louver will change one step at a time.

3. Remove the 3 or 4 screw covers (depend on the model) and the mounting screws of the frame grille (please refer to the illustration).

FOR MODEL: FWBE-13 ,FWBE-19 & FWBE-25



4. Set the horizontal louver at close position, detach horizontal louver stud on left side and push inside (please see illustration).

/ w

When performing this action, please do it gently to avoid damaging the louver.



* CHECKING THE DRAINAGE

- 1. Turn off power to the unit.
- 2. Pour a glass of water into the drain pan.
- 3. Ensure that the water flows out from the drain hose of indoor unit.



* WIRING CONNECTIONS



* Always refer to the wiring diagrams supplied with this manual.

Drain Pan

- * Check local electrical codes and also any specific wiring codes.
- * Main power supply must be connected to outdoor unit.

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INSTALLATION PROCEDURE

Connect the unit to adequate power outlet. (Rating voltage ±10% during operation) Adequate Power Outlet

Time delay fuse or Circuit	Amp.	Model Used					
Breaker	25/30A	FWBE-13,FWBE-19 & FWBE-25					
Power outlet 3 Poles	2 Poles for th	e Power and 1 Pole for the Earth Terminal/Ground.					

- 1. After removing the front grille, connect the wiring.
- 2. Remove the wire retainer.
- 3. Insert the connecting cable (according to local codes) into pipe hole on the wall.

FOR MODEL: FWBE-13,FWBE-19,FWBE-25



4. Field wiring insulation length to be removed.



5. All indoor and outdoor unit inter-connections wire must be AWG18 stranded wire.6. Insert the connecting cable fully into the terminal blocks and secure it by screw tightly.



FOR MODEL: FWBE-13,FWBE-19,FWBE-25

- * OPERATION GUIDE
- COOLING OPERATION (COOL)
- 1. PRESS THE ON/OFF BUTTON $m{0}$
 - The air conditioner comes ON and display module shown the last setting.
- 2. PRESS THE MODE BUTTON
 - Press the mode key repeatedly until the word "COOL" appears on the display. The $\, \&\,$ symbol will lit up in the module.
- 3. PRESS THE TEMPERATURE BUTTON 🔄 TO REGULATE THE TEMPERATURE.
 - The key with the symbols A allows increases of 1°C

 - The display shows the set value, the temperature can be between 18°C and 30°C.
- 4. PRESS THE FAN BUTTON 🧏
 - When the Skey is pressed repeatedly, the system will changed the fan to auto, low, med, and high speed
- 5. PRESS THE SW BUTTON AND UV BUTTON.
 - When the w key is pressed, the horizontal louver is oriented continuously oscillating movements. Press again to stop.
 - When the *w* key is pressed, the angle of the horizontal louver will change one step at a time.
- DEHUMIDIFICATION OPERATION (DRY)
- 1. PRESS THE ON/OFF BUTTON $m{0}$
 - The air conditioner comes ON and display module shown the last setting.
- 2. PRESS THE MODE BUTTON
 - Press the mode key repeatedly until the word "DRY" appears on the display. The
 symbol will lit up in the module.
 - The system will operate as the humidifier to reduce the humidity in the air.
- 3. PRESS THE TEMPERATURE BUTTON TO REGULATE THE TEMPERATURE.
 - The key with the symbols

 A allows increases of 1°C
 - The key with the symbols 🗡 allows decreases of 1°C
 - The display shows the set value, the temperature can be between 18°C and 30°C.
- 4. PRESS THE SW BUTTON AND U BUTTON.
 - When the w key is pressed, the horizontal louver is oriented continuously oscillating movements. Press again to stop.
 - When the Lv key is pressed, the angle of the horizontal louver will change one step at a time.

REMOTE CONTROLLER & OPERATION GUIDE

8. CLOCK

To set clock on the Remote unit is by.

- Press ${\mathfrak S}$ button, the symbol $\,\,\ominus\,\,$ and time display will blink.
- Press \checkmark or \checkmark button, to set the clock, hold the button for fast changing.
- Press ${\mathfrak S}$ again, the symbol $\, {\mathbb G}\,$ and time display will stop blinking.

9. AUTO START

The air conditioner can be programmed to turn on in advance.

- Press 🟵 ON button, the symbol ON and start-time display will blink,
- Press \land or 🗸 button, to set the clock, hold the button for fast changing.
- Press 🕙 ON button again, the symbol ON and start-time display will stop blink, To cancel this function, press 🛇 ON button again.

10. AUTO STOP

The air conditioner can be programmed to turn off in advance.

- Press 🟵 OFF button, the symbol OFF and stop-time display will blink,
- Press A or V button, to set the clock, hold the button for fast changing.
- Press ☺ OFF button again, the symbol OFF and stop-time display will stop blink, To cancel this function, press ☺ OFF button again.

11. SEND

Press SEND button to transmit all parameters shown on the LCD to the main control board.

12. KEYLOCK

13. TURBO

Press TURBO button in cool mode will start the fast cooling function.

The LCD on the Remote unit will show TURBO symbol. The Temperature setting and fan speed setting will disappear. The controller will turn on the compressor and turn on the fan at high speed for 30 minutes.

The Turbo function will be terminated when

- Press TURBO button again while the turbo function working.
- The TUBO function has been operated for 30 minutes.
- Power off or the operation mode is changed.

14. ECONO

Press ECONO button in cool mode will start the energy saving function. The LCD on the Remote unit will show ECONO symbol. The Temperature setting and fan speed setting will disappear. The controller will working at auto fan speed. The temperature setting will be 25°C if in cool.

The Econo function will be terminated when

- Press ECONO button again while the econo function working.
- The operation mode was changed

HOW TO INSTALL THE FRAME GRILLE ON THE INDOOR UNIT

1. Install the frame grille in the opposite order of "HOW TO REMOVE THE FRAME GRILLE". When the frame grille is removed and mounted again, take the following actions: Before fastening the mounting screws be sure to hook the top inside lock of the frame grille.



- 2. Re-connect the display board connection and return it to the original location, return the terminal cover by fastening it's screw.
- 3. Close and push the front panel into the frame grille until the "click" sound is heard

FOR MODEL: FWBE-13, FWBE-19, FWBE-25



If cooling and dry operation is made without closing the front panel properly, dew can be deposit on the front grille surface. In addition, the unit appearance will suffer if the gap between front panel and the frame grille is too wide.

DIMENSIONS OUTDOOR UNIT



	MODEL	DIMENSIONS (MM.)						
	WIODEL	А	В	С	D	E		
	CHLE13BIS-AF1R CHLE19BIS-AF1R	1040	710	427	385	628		
	CHLE25BIS-AF1R	1040	862	427	385	628		

(Solar Thermal Hybrid Air Conditioning System)

Solar Hybrid Air Inverter



Advantage of Solar Hybid Air Inverter

- 1. The Solar Hybrid air inverter use a combination of both DC solar generated power and main AC generated power. This can saving your mains power usage cost.
- 2. The cooling load in the Solar Hybrid air inverter system varies directly with intensity of sunlight, therefore the solar panel can provide maximum efficiency.
- 3. The Solar Hybrid system receives energy directly from solar panel no need battery.
- 4. The solar hybrid air inverter's price is more economical than the solar inverter with air inverter.
- No need permission request from the electricity generating authority to install the system, Since there is no reverse electric power flow back into the electrical system.
- 6. The efficiency of the Solar Hybrid system (SEER) is higher than general air conditioner system.
- 7. Convenient for every residential, building and office. During the day, When air conditioning is needed the most. (At night, the solar hybrid unit operates by only main AC generated power.)

Operating mode

- Normal operating mode : The system will use as much solar energy as is available and this solar energy directly replaces the equivalent amount of AC power from the mains provider. If the solar energy is not enough, the system will combine both DC and AC power to control the compressor's frequency with indoor controller. Therefore the system can operate in whatever weather. Even when the sun is not shining at all during the night.
- 2. Energy saving mode : The system will use as much solar energy as Normal operating mode, The compressor's frequency vary with only intensity of the sunlight. But if energy is not enough, this mode will combine with the least of AC power as possible to run the compressor at the lowest frequency.

1. POWER ON/OFF

Press POWER \bigcirc button will turn on the air conditioner or vice versa. When turn on, it will operate according to the setting shown on the Remote unit and there is a delay time (3-6 seconds) before the fan motor can operate.

2. FAN

Press FAN **\$** button to the select the fan speed (High, Medium, Low or Auto mode). The display on the Remote unit will shown the status.



Note: The FAN S button can be used only in FAN and COOL mode it can not be used in DRY mode.

3. OPERATING MODE

By pressing the MODE button, the air conditioner can be put in

· 3 operating mode (fan, cool, dry) if the cool version is ordered.



- FAN : The LCD on the Remote unit will show FAN. The system will operate as FAN only. The SLEEP, TEMP → ,TEMP → TURBO and ECONO button are not used.
- COOL : The LCD on the Remote unit will show COOL. The system will operate as the air conditioner.
- DRY : The LCD on the Remote unit will show DRY. The system will operate as the humidifier.

4. TEMPERATURE SETTING

The setting temperature can be set in the range of 18-30°C by pressing TEMP \checkmark or TEMP \checkmark button. The LCD on the Remote unit will show the setting temperature

5. LOUVER

Press LV button to change the angle of the louver (which is controlled bythe step motor).

- If the button is pressed and released, the angle of the louver is change one step at a time.
- If the button is pressed and held, the angle of the louver is changed until the button released.

6. SWEEP

Press SW button will turn on/off the sweep motor.

7. SLEEP

Press the SLEEP button, the LCD on the Remote unit will show ★ symbol. For Cool operating mode, it will raise up the setting temperature for 1°C after one hour. For Heat operating mode it it will decrease 1°C after one hour.

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Wired Remote Controller



DESCRIPTION AND FUNCTION OF REMOTE CONTROLLER COOL ONLY



AC POWER	SOLAR DC PC	OWER				
		Item	Model	09-13KBTU	09-25KBTU	28-40KBTU
		Solar	DC Voltage		Max 400Vcc	
		Power	DC Current		Max 10Acc	
RAN I			PV Panel (250+330W)	3-5 panels (sery)	4-7 panels (sery)	5-8 panels (sery)
AC Voltage Ø 220 Vrms s	20%		SOLAR PV PANEL APP	LICATION USES FO	R IRCOND.INVERTE	R
Frequency 50/60 Hz ±	5%	44 (** * **				
						20
BLI	DC COMPRESSOR DRIVER	OUTDOOR U	JNIT	1	NDOOR UNIT	

Compare the pros and cons of the solar hybrid inverter air conditioner system with Solar inverter

1. The Solar Hybrid system receives energy directly from solar panel no need battery.

- 2. Convenient for every residential, building and office. During the day, When air conditioning is needed the most. (At night, the solar hybrid unit operates by only main AC generated power.)
- 3. The Solar Hybrid air inverter's price is more economical than the Solar Inverter with air inverter.
- 4. No need permission request from the electricity generating authority to install the system, Since there is no reverse electric power flow back into the electrical system.

WIRING DIAGRAM

The connection between electrical circuits Indoor and Outdoor Unit





REMOTE CONTROLLER & OPERATION GUIDE

■ PREPARATION OF THE REMOTE CONTROLLER

- Open the battery cover by pressing slightly in the direction of arrow.
- Insert two 1.5 Volt high performance alkaline batteries (AAA), be careful not to invert the polarity.
- Close the battery cover.

■ USE OF THE REMOTE CONTROLLER

- Be sure that no obstructions between receiver and remote controller.
- The remote control signal can be received at the distance of up to about 7 Me
- Point the remote control unit transmitter towards the air conditioner receiver while the setting is being stablished.
- To be able to carry out any operation or change of the setting from the remote control unit air conditioner must be powered.
- When a signal is receive correctly by the unit, the unit will emit a beep. If you do not hear the sound, press the remote control button again.

IMPORTANT

- Don't drop or throw the remote controller.
- Don't put any liquid in the remote controller and don't put it directly under the sunlight or any place where is very hot.
- Remove batteries when the remote controller is not in use for a long time.
- The two batteries must be identical and must changed at the same time.
- The remote controller should be place 1 Meter or more away from TV. or any other electric appliances.